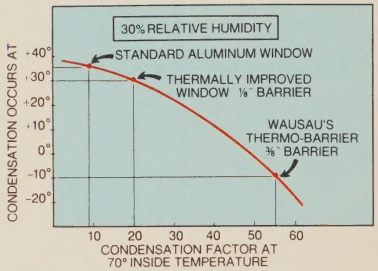
Thermo-barrier

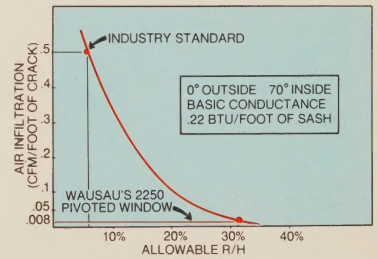
by WAUSAU

THE ADVANCED Thermo-barrier

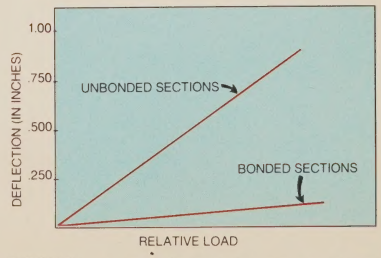
Here's a Thermo-Barrier Window so advanced in theory, design and performance that it's revolutionary. A large barrier delivers maximum protection against cold penetration. Strategic barrier placement assures warmer inside surface temperature in the winter and holds the cool of your air conditioning in the summer. The bonded fill process produces a strong Mechanical/ Chemical interlock. This same single extrusion method guarantees precise window tolerances. Mated to the exceptional quality of Wausau's already High Performance window, the Wausau Thermo-Barrier System successfully combats condensation, heat loss and noise penetration. It's available in 2¼", 3¼", 4½" fixed, 2¼" projected, 2¼" top-hung, 2¼" casement, 2¼" pivoted and 3¼" pivoted with integral venetian blind. The next time you think Thermo-Barrier, settle for only the top in quality and performance, WAUSAU THERMO-BARRIER.



HUMIDITY CONTROL — A Thermo-Barrier should be as long in the direction of temperature flow as possible — The Wausau Thermo-Barrier is a full ⅜".

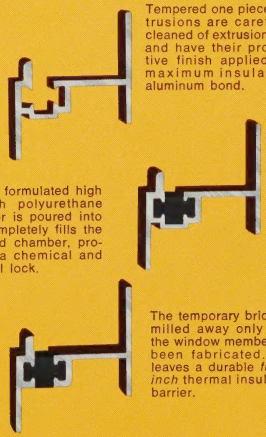


AIR INFILTRATION — Venting windows must be of the highest quality with regard to weathertightness for a successful thermal break — Wausau matches the precise tolerances of this system to their already high performance windows.

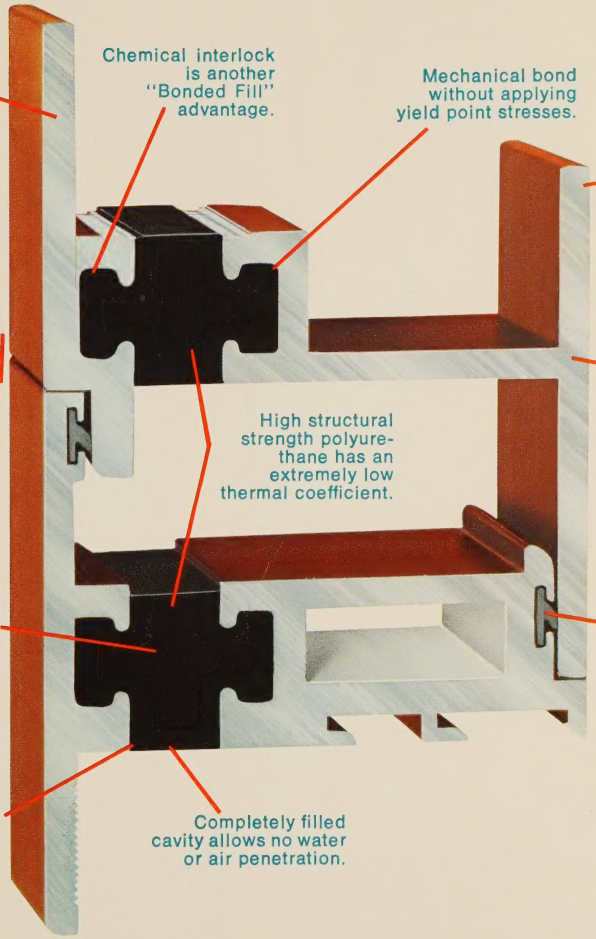


STRENGTH — A chemically bonded barrier transfers load through depth of section reducing deflection under both concentrated and uniform stress — Wausau's process makes this chemical bond possible.

This patented process makes it advanced



ADVANCED SO MANY WAYS



Non-bridging hardware and anchorage systems preserve the integrity of the thermal separation.

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SPECIFICATIONS

GENERAL SCOPE: All aluminum windows shall be 2250T Series Thermal-Barrier type as manufactured by Wausau Metals Corporation, Wausau, Wisconsin.

WINDOW TYPE: Windows shall be one or more of the following types: ☐ Fixed; ☐ Projected; ☐ Top-Hung; ☐ Casement (Inswing or Outswing); ☐ Pivoted (Vertical or Horizontal).

MATERIALS: Aluminum shall have a minimum wall thickness of .125″ extruded from 6063T5 alloy with a tensile strength of 28,000 PSI. Each aluminum member shall be extruded as a single section, filled with a polyurethane insulator as described below then the aluminum bridge removed after finishing to establish interior and exterior sections.

CONSTRUCTION: All sash members shall be tubular in construction with mitered corners reinforced with aluminum corner blocks, "cold welded" with epoxy adhesive and hydraulically crimped. Sash shall be 2¼″ deep and present a flush condition with the frame.

Frame members shall be 2¼″ in depth. Pivoted window frame members shall be mitered and reinforced with aluminum corner blocks, cold welded with epoxy adhesive and hydraulically crimped. Projected, fixed, top hung and casement frames shall be filler-arc welded. All joints shall be factory sealed to form a watertight corner.

THERMAL BARRIER: The thermal insulator shall be poured in place polyurethane. The polyurethane shall be self-adhering to the adjacent aluminum surfaces. There will be a minimum of ⅜″ separation between exterior and interior metal components after the bridge has been removed. No hardware or fasteners shall violate the barrier or any part thereof in any way.

GLAZING: Glazing shall be accomplished with ¾″ deep glazing rabbet and extruded aluminum snap in glazing beads designed to accommodate insulated glass of required thickness.

WEATHERSTRIPPING: Double neoprene weatherstripping shall be installed in specially designed dovetail grooves extruded in sash members. Pivoted sash shall have a double row of closed cell sponge neoprene continuous around entire perimeter with no interruptions and corners shall be vulcanized to produce a one piece gasket.

HARDWARE: All hardware shall be designed to function without bridging the Thermal-Barrier as follows:

Projected

Provide white bronze cam handles with concealed stainless strikes for inward projecting sash and white bronze surface mounted cams for outward projecting sash. Sash shall operate on special 4 bar hinges with heavy arms.

Casement

Sash shall be suspended on heavy duty 4 bar stainless steel balance arms with brass friction shoes positioned for easy adjustment; or, heavy duty 2 bar stainless steel concealed hinges and a heavy duty roto operator.

Top-Hung

Sash shall be suspended on heavy duty 4 bar stainless steel balance arms with brass friction shoes positioned for easy adjustment. The sash shall be equipped with a minimum of 3 concealed, flush mounted white bronze cam locks installed in nylon bearing blocks which will act as sash equalizers at jambs and sill. All cam locks shall be fitted with a neoprene "O" ring to render the rotating shaft water and air tight. Locks shall be operated by a custodial type key. Lock spacing shall not exceed 3′-0″ from centerline to centerline of lock.

Pivoted

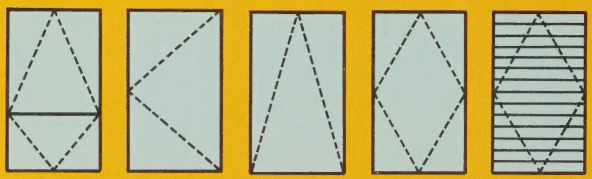
Pivot mechanisms shall be white bronze and stainless steel. All sash under 6′-0″ in height shall have (2) locks, one in each jamb. All sash over 6′-0″ in height shall have (4) locks, 2 in each jamb. Mechanisms shall allow sash to rotate 360 degrees. Jamb locks shall be mounted on the frame so designed that the rotating lock is sealed with a neoprene "O" ring against air and water infiltration. Operation will be by key designed to allow sash to open 4″ initially for safety. A keyed release will then allow sash to rotate to a 180 degree position and automatically lock. Repetition of this procedure shall allow sash to return to original position. Keys shall not be removable unless the hardware is in the locked position.

FINISH: All windows and exposed trim shall have an alumilite (204-R1) anodized finish with 2 coats of methacrylate lacquer or ANOLOK 500 finish in color selected by the architect.

TESTING: The performance specifications of Thermal-Barriered Window Systems shall meet or exceed air and water infiltration and deflection test requirements as defined by AAMA (latest revision) for equivalent non barriered windows (i.e., TH-A3, VP-A3, etc.).

STORAGE: Windows and related accessories shall be crated and stored in strict compliance with the window manufacturer's instructions.

The WAUSAU Thermo-Barrier is available in the following window types.



Projected | Casement | Top-Hung | Pivoted | Pivoted — with integral venetian blind

WRITE WAUSAU FOR a complete set of tracing sheets, or contact your local Wausau Representative.

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